

H5003-  
5035.

D5714-  
5731.

507

Lost Bridge #5713

H 5003  
5025

D 5714  
31

Dredge } No. 5203 Date, July 23, 1912  
Hydrog. }

Sdg. Mch. Hand lead Reel Shot Lead 24 lbs.

Turns Cor'n Depth 42 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make mz. No. 69479 Cor'n { Instr. Stem.

Bottom Reading 54.7 Cor'd Temp. 54.63

Temp. Surf. { 55 Time 1:17P } Air { 57  
54.83 Time

Density: Surf. fms.

Wind: Direction West Force 5-6

Baromet. 30.16 Amt. of Clouds 1 State of Sea C

Weather bc

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Inter.

Apparatus and Rig used 4' Inter + 2 Kofas

Time towing h. 10 m.

Remarks: Water bottle used on sounding line.

Deck Officer Mr. Olney Recorder H. W. Crider

SOUNDING WIRE.						FMS.	DREDGING CABLE.					
P	M.	DOWN.	UP.	P	M.		P	M.	DOWN.	UP.	P	M.
1	08	20	1	18	20	0	1	09	00	1	17	00
						100						
						200						
						300						
						400						
						500						
						600						
						700						
						800						
						900						
						1000						
						1100						
						1200						
						1300						
						1400						
						1500						
						1600						
						1700						
						1800						
						1900						
						2000						
						2100						
						2200						
						2300						
						2400						
						2500						
						2600						
						2700						
						2800						
						2900						
						3000						
						3100						
						3200						
						3300						
						3400						
						3500						
						3600						
						3700						
						3800						
						3900						
						4000						
						4100						
						4200						
						4300						
						4400						
						4500						
						4600						
						4700						
						4800						
						4900						

Dredge } No. 5004 Date, Feb 23, 1912  
 Hydrog. }  
 Sdg. Mch. Hand lead of Reel Shot } 24 lbs.  
 Lead }  
 Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 5 fms.  
 Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
 Character of Bottom \_\_\_\_\_  
 Thermom. { Make M3  
 No. 69479 Cor'n { Instr. \_\_\_\_\_  
 Stem. \_\_\_\_\_  
 Bottom Reading 54.7 Cor'd Temp. 54.63  
 Temp. Surf. { 55 Time 1145 P Air { 57  
 54.83 Time \_\_\_\_\_  
 Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_  
 Wind: Direction west Force 5-6  
 Baromet. 30.12 Amt. of Clouds 1 State of Sea C  
 Weather bc  
 Direction and Force of Current { Surface \_\_\_\_\_  
 Bottom \_\_\_\_\_  
 Tide \_\_\_\_\_  
 General Locality \_\_\_\_\_  
 Position \_\_\_\_\_  
 Chart used: No. \_\_\_\_\_ Ed'n \_\_\_\_\_  
 Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_  
 Depth of Haul Inter  
 Apparatus and Rig used 4 Inter. + 29 fms.  
 Time towing h. 10 m.  
 Remarks: Water bottle used on  
 sounding line  
 Deck Officer Mr. Clancy Recorder H. W. Grier

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
P. M. Down.	Up.	P. M.		P. M. Down.	Up.	P. M.
1 34 30	1 45 00		0	1 35 00	1 45 00	
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 5005 Date, Feb 23, 1912  
Hydrog. }  
Sdg. Mch. Hand lead Shot 20 lbs.  
Lead 6  
Turns Cor'n Depth fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom

Thermom. { Make W. No. 69479 Cor'n { Instr. Stem.

Bottom Reading 54.7 Cor'd Temp. 54.63

Temp. Surf. { 55 Time 2:12 P Air { 57  
54.83 Time

Density: Surf. fms.

Wind: Direction West Force 4-5

Baromet. 30.12 Amt. of Clouds 1 State of Sea C

Weather bc.

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Inter

Apparatus and Rig used 4' Inter & 2 Profondo

Time towing h. / 0 m.

Remarks: Water bottle used on landing  
fine

Deck Officer Mr. Clancy Recorder H. W. O'Brien  
11-1023



SOUNDING WIRE.						FMS.	DREDGING CABLE.					
P M. DOWN.			UP.		P M.		P M. DOWN.			UP.		P M.
2	02	30	2	12	30	0	2	05	00	2	11	20
						100						
						200						
						300						
						400						
						500						
						600						
						700						
						800						
						900						
						1000						
						1100						
						1200						
						1300						
						1400						
						1500						
						1600						
						1700						
						1800						
						1900						
						2000						
						2100						
						2200						
						2300						
						2400						
						2500						
						2600						
						2700						
						2800						
						2900						
						3000						
						3100						
						3200						
						3300						
						3400						
						3500						
						3600						
						3700						
						3800						
						3900						
						4000						
						4100						
						4200						
						4300						
						4400						
						4500						
						4600						
						4700						
						4800						
						4900						

Dredge } No. 5006 Date, Feb 23, 1912  
Hydrog. }

Sdg. Mch. Hand lead off Reel Shot Lead 24 lbs.

Turns Cor'n Depth 6 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make W No. 69479 Cor'n { Instr. Stem.

Bottom Reading 55.2 Cor'd Temp. 55.3

Temp. Surf. { 54.7 Time 2.48 P } Air { 57  
54.53 Time

Density: Surf. fms.

Wind: Direction West Force 4-5

Baromet. 30.12 Amt. of Clouds 1 State of Sea C

Weather bc

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Inter

Apparatus and Rig used 4' Inter 2 Kofors

Time towing h. m.

Remarks: Water bottle used on sounding line

Deck Officer M. Clancy Recorder H. W. Coker

SOUNDING WIRE.		FMS.	DREDGING CABLE.	
<u>1</u> M. Down.	Up. <u>1</u> M.		<u>1</u> M. Down.	Up. <u>1</u> M.
23430	24200	0	23100	24800
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		
		2500		
		2600		
		2700		
		2800		
		2900		
		3000		
		3100		
		3200		
		3300		
		3400		
		3500		
		3600		
		3700		
		3800		
		3900		
		4000		
		4100		
		4200		
		4300		
		4400		
		4500		
		4600		
		4700		
		4800		
		4900		

Dredge } No. 5007 Date, July 3, 1912  
Hydrog. }  
Sdg. Mch. 1000 Reel Shot Lead lbs.  
Turns ----- Cor'n ----- Depth 6 3/4 fms.  
Sdg. Cup ----- Amt. Bot'm Sample -----  
Character of Bottom -----

Thermom. { Make Wz. Cor'n { Instr. -----  
              { No. 69479                 { Stem. -----

Bottom Reading 54' Cor'd Temp. 53.93

Temp. Surf. { 54.6 Time 3:18 P.M. } Air { 56  
                  { 54.73 Time ----- } -----

Density: Surf. ----- fms. -----

Wind: Direction West Force 4 S

Baromet. 30.08 Amt. of Clouds 1 State of Sea C

Weather bc

Direction and Force of Current { Surface -----  
  { Bottom -----

Tide -----

General Locality -----

Position -----

Chart used: No. ----- Ed'n -----

Drift: Direction ----- Distance -----

Depth of Haul Inter

Apparatus and Rig used 4' Inter + 1/2 fms

Time towing h. m.

Remarks: water bottle used in  
Dredging line

Deck Officer Mr. Blaney Recorder J. J. Fisher

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
P	M. DOWN.	UP. P		P	M. DOWN.	UP. P
3	08 30	3	0	3	11 30	3
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

~~Haul No.~~ } No. 1008 Date, July 1, 1911  
Hydrog. }  
Sdg. Mch. / Reel Shot / Lead lbs.  
Turns ----- Cor'n ----- Depth 10 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom

Thermom. { Make T.V. Cor'n { Instr. -----  
                  { No. 69479                   { Stem. -----  
Bottom Reading 53.8 Cor'd Temp. 53.73

Temp. Surf. { Time 1:30 } Air {  
                  { Time 1:17 }                   {

Density: Surf. fms. -----  
Wind: Direction West Force 2-3  
Baromet. Amt. of Clouds 1 State of Sea C  
Weather bc

Direction and Force of Current { Surface -----  
  { Bottom -----

Tide -----

General Locality -----

Position -----

Chart used: No. ----- Ed'n -----

Drift: Direction ----- Distance -----

Depth of Haul Intw.

Apparatus and Rig used 4 fms. 4 fms.

Time towing h. m.

Remarks: 100 fms. haul  
100 fms. haul

Deck Officer Wm. H. Hays Recorder J. H. Hays

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	L. M.		M. Down.	Up.	M.
3 1/2 00	3 00	00	0	3 00	00	00
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Hydrog. No. 1000 Date, Feb 27, 1917

Sdg. Mch. Reel Shot/Lead 22 lbs.

Turns Cor'n Depth 11 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom SM

Thermom. { Make No. 715 Cor'n { Instr. Stem.

Bottom Reading 51.6° Cor'd Temp.

Temp. Surf. { 52.8° Time 10:26 1/2 a } Air { Time }

Density: Surf. fms.

Wind: Direction NW Force 1

Baromet. 30.2 Amt. of Clouds 4 State of Sea S

Weather Bcs

Direction and Force of Current { Surface Bottom

Tide Ebb

General Locality San Francisco Bay

Position { Lat 37° 42' N Long 122° 27' W

Chart used: No. 1552 Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used 4' Beam Trawl

Time towing h. m.

Remarks: 1/2 hour

Deck Officer W. Stead Recorder



SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. Down.	Up.		M. Down.	Up.	M.
10	10	0			
		100			
		200			
		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1300			
		1400			
		1500			
		1600			
		1700			
		1800			
		1900			
		2000			
		2100			
		2200			
		2300			
		2400			
		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			

Acad. Ge. } No. 5010. Date, Feb 27, 1912  
Hydrog. }

Sdg. Mch. *Line* Reel Shot *2 1/2* Lead lbs.

Turns ..... Cor'n ..... Depth ..... 12 fms.

Sdg. Cup ..... Amt. Bot'm Sample .....

Character of Bottom

Thermom. { Make *7.*  
              { No. *69479.*

Cor'n { Instr. *7.*  
          { Stem. *7.*

Bottom Reading 52.6° Cor'd Temp. 52.53

Temp. Surf. { 53.° Time 11:13:30 a. Air {

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction *Calm* Force *0*

Baromet. 30.27 Amt. of Clouds 6 State of Sea 2

Weather: *over*

Direction and Force of Current.	{	Surface	.....
		Bottom	.....

Tide... Ebb

General Locality \_\_\_\_\_

Position: Quadrant 14 S227E - Cont. Is 14 N26W.  
Tracing 12/50 7.5711

Chart used: No. C 552 Ed'n

Drift: Direction	Distance
------------------	----------

Depth of Haul . . . . .

Apparatus and Rig used 9" Inlet & 1" Nozzle

Time towing h. m.

[illegible]Deck Officer *Mr. J. J. J. J.* Recorder *J. J. J. J.*

## SOUNDING WIRE.

A. M. Down. Up. A. M.

11 01 30 11 15 00

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0  
100  
200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900

Hydrog. No. 5011 Date, Feb. 22, 1912

Sdg. Mch. Line Reel Shot/Lead 34 lbs.

Turns Cor'n Depth 0 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom ST

Thermom. { Make T-5 No. 69479 Cor'n { Instr. Stem.

Bottom Reading 52.50 Cor'd Temp. 52.43

Temp. Surf. { 50.50 Time 11.35 a { Air { 50.33 Time

Density: Surf. fms.

Wind: Direction Force

Baromet. 30.28 Amt. of Clouds 6 State of Sea S

Weather

Direction and Force of Current { Surface Bottom

Tide Ebb

General Locality

Position

Chart used: No. CS 5131 Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer W. E. Stanley Recorder

11-1023

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

A. M. Down. Up. A. M.

M. Down. Up. M.

11 26 20 11 36 20

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

~~Trawl~~ } No. 1015 Date, June 27, 1915  
 Hydrog. }  
 Sdg. Mch. Lucas Reel Shot Lead 1 lbs.  
 Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 6 fms.  
 Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
 Character of Bottom \_\_\_\_\_  
 Thermom. { Make N.Y. Cor'n { Instr. \_\_\_\_\_  
 { No. 69479 { Stem. \_\_\_\_\_  
 Bottom Reading 5-3.0° Cor'd Temp. 52.93  
 Temp. Surf. { 53.6 Time 12:51 } Air { \_\_\_\_\_  
 { \_\_\_\_\_ Time \_\_\_\_\_ } { \_\_\_\_\_  
 Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_  
 Wind: Direction Cal'n Force 0  
 Baromet. 30.21 Amt. of Clouds 0 State of Sea 5  
 Weather \_\_\_\_\_  
 Direction and Force of Current { Surface \_\_\_\_\_  
 { Bottom \_\_\_\_\_  
 Tide \_\_\_\_\_  
 General Locality \_\_\_\_\_  
 Position \_\_\_\_\_  
 Chart used: No. \_\_\_\_\_ Ed'n \_\_\_\_\_  
 Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_  
 Depth of Haul Near to  
 Apparatus and Rig used 4' Intermediate dredge, 2 Kelp  
 \_\_\_\_\_ Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.  
 Remarks: Water bottle used

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
P M. Down.	Up.	P M.		P M. Down.	Up.	P M.
12 43 22	12 43 22		0	12 43 22		
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 14013 Date, 7, 1912  
Hydrog. }

Sdg. Mch. Hand Reel Shot 24 lbs.

Turns Cor'n Depth 57 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make N.Y. Cor'n { Instr. No. 69479 Stem.

Bottom Reading 53.2° Cor'd Temp. 53.13

Temp. Surf. { 53.5° Time 1:11 Air { 51.5° Time

Density: Surf. fms.

Wind: Direction Calm Force 0

Baromet. 30.22 Amt. of Clouds 1 State of Sea 0

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul nearly at bottom

Apparatus and Rig used 4' beam trawl

Time towing h. m.

Remarks: 1000 yds. towed, net was empty.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Net was empty, no fish or other animals were taken.

Deck Officer Recorder



SOUNDING WIRE.					FMS.	DREDGING CABLE.						
P. M. Down.		Up.	P. M.			P. M. Down.		Up.	P. M.			
12	5-8	457	1	0-8	113-	0	12	5-8	113-	11	08	30
						100						
						200						
						300						
						400						
						500						
						600						
						700						
						800						
						900						
						1000						
						1100						
						1200						
						1300						
						1400						
						1500						
						1600						
						1700						
						1800						
						1900						
						2000						
						2100						
						2200						
						2300						
						2400						
						2500						
						2600						
						2700						
						2800						
						2900						
						3000						
						3100						
						3200						
						3300						
						3400						
						3500						
						3600						
						3700						
						3800						
						3900						
						4000						
						4100						
						4200						
						4300						
						4400						
						4500						
						4600						
						4700						
						4800						
						4900						

11-1475

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
/ 40 70	/ 50 57		0	/ 70 00	/ 50 57	
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 1448 Date, 5/1/1912  
Hydrog. }

Sdg. Mch. Hand Reel Shot } 27 lbs.  
Lead }

Turns Cor'n Depth 4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make H. Z. Cor'n { Instr. No. 69479 Stem.

Bottom Reading 53° Cor'd Temp. 52.93

Temp. Surf. { 53.2° Time 2:11 } Air { 53.9° Time

Density: Surf. fms.

Wind: Direction Calm Force 0

Baromet. 30.19 Amt. of Clouds 1 State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Close to bottom

Apparatus and Rig used 4' Dredge

1 minute

Time towing h. m.

Remarks: Station with mud

Deck Officer Mrs. Stanley Recorder L. A. H. 11-1023

SOUNDING WIRE.						FMS.	DREDGING CABLE.					
✓	M. Down.	Up.		M.			✓	M. Down.	Up.		M.	
2	01	30	2	11	30	0	2	05	00	2	10	30
						100						
						200						
						300						
						400						
						500						
						600						
						700						
						800						
						900						
						1000						
						1100						
						1200						
						1300						
						1400						
						1500						
						1600						
						1700						
						1800						
						1900						
						2000						
						2100						
						2200						
						2300						
						2400						
						2500						
						2600						
						2700						
						2800						
						2900						
						3000						
						3100						
						3200						
						3300						
						3400						
						3500						
						3600						
						3700						
						3800						
						3900						
						4000						
						4100						
						4200						
						4300						
						4400						
						4500						
						4600						
						4700						
						4800						
						4900						

~~Hydrog.~~ No. 5016 Date, Feb 27, 1912

Sdg. Mch. Hand Line Reel Shot Lead 24 lbs.

Turns Cor'n 0 Depth 4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make M. Cor'n { Instr. No. 64479 Stem.

Bottom Reading 53° Cor'd Temp. 52.93

Temp. Surf. { 53° Time 2:32 } Air { 53.5° Time 52.93

Density: Surf. fms.

Wind: Direction Calm Force 0

Baromet. 30.17 Amt. of Clouds 2 State of Sea 8

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Close to bottom

Apparatus and Rig used 4' net, 1' dipnet, 1' snubber

Time towing h. m.

Remarks: 1st net empty

Deck Officer Recorder

SOUNDING WIRE.				FMS.	DREDGING CABLE.						
M. Down.		Up.	M.		M. Down.		Up.	M.			
2	21	00	2	31	25	2	22	00	2	30	00
			</								

Dr. & } No. 5017 Date, Feb 27, 1912  
Hydrog.

Sdg. Mch. *Hand* Reel *Hot* *Lead* *2* lbs.

Turns . . . . . Cor'n . . . . . Depth 5 fms.

*Sdg. Cup* ..... *Amt. Bot'm Sample* .....

Character of Bottom .....

Thermom. { Make H.B. ..... Cor'n { Instr.  
              { No. 69479 .....               { Stem.

Bottom Reading 52.6 Cor'd Temp. 52.73

Temp. Surf. {  $52.4^{\circ}$  Time  $9:01$  } Air {  $54.5^{\circ}$   
 {  $52.4^{\circ}$  Time } {  $54.5^{\circ}$

Density: Surf. fms.

Wind: Direction Calm Force 0

Baromet. 30.17 Amt. of Clouds 3 State of Sea 2

Weather *Sunny*

Direction and Force of Current.  $\left\{ \begin{array}{l} \text{Surface} \\ \text{Bottom} \end{array} \right.$

[illegible]

General Locality \_\_\_\_\_

Position ..... 1 .....

Chart used: No. Ed'n

Drift: Direction	Distance
------------------	----------

Depth of Haul . *Close to bottom* -----

Apparatus and Rig used 4' Instron 1130 + Model

Time towing h, m

Remarks: \_\_\_\_\_

Deck Officer W. S. ... Recorder ...



SOUNDING WIRE.					FMS.	DREDGING CABLE.						
M. Down.	Up.	P.	M.	P.M. Down.		Up.	P.	M.				
2	51	00	3	01	15	0	2	51	00	2	59	30
						100						
						200						
						300						
						400						
						500						
						600						
						700						
						800						
						900						
						1000						
						1100						
						1200						
						1300						
						1400						
						1500						
						1600						
						1700						
						1800						
						1900						
						2000						
						2100						
						2200						
						2300						
						2400						
						2500						
						2600						
						2700						
						2800						
						2900						
						3000						
						3100						
						3200						
						3300						
						3400						
						3500						
						3600						
						3700						
						3800						
						3900						
						4000						
						4100						
						4200						
						4300						
						4400						
						4500						
						4600						
						4700						
						4800						
						4900						

Alber H. 1883

Dredge } No. 114 Date July 28, 1911  
Hydrog. }  
Sdg. Mch. Shot & Lead 7.0 lbs.  
Reel

Turns Cor'n Depth 1 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Co. 1

Thermom. { Make  
No.

Cor'n { Instr.  
Stem.

Bottom Reading

Cor'd Temp.

Temp. Surf. { 50 Time 10:16 } Air { 57  
50 Time 10:17 } 61

Density: Surf.

fms.

Wind: Direction Calm Force 0

Baromet. 30.11 Amt. of Clouds 7 State of Sea 3

Weather bc

Direction and Force of Current { Surface  
Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used 5' beam trawl

2 ring weights 10 lb weight

1 foot line

Time towing h. 18 m.

Remarks:

Deck Officer M. J. Pettig Recorder J. W. Fisher

## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0	10	13	30	10	36	30
100	10	16	20	10	34	20
200						
300						
400						
500						
600						
700						
800						
900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						
2500						
2600						
2700						
2800						
2900						
3000						
3100						
3200						
3300						
3400						
3500						
3600						
3700						
3800						
3900						
4000						
4100						
4200						
4300						
4400						
4500						
4600						
4700						
4800						
4900						

H. 5010

11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0	11	07	20
			25	11	09	10
			200			11
			300			26
			400			00
			500			24
			600			40
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Hyd. 5019  
89.

020H50201

Dredge } No. 5716 Date, Feb 28, 1913  
Hydrog. }  
Sdg. Mch. T. S. S. Reel Shot/Lead 14 lbs.  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 6 fms.  
Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample 9 "  
Character of Bottom M

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
                  { No. \_\_\_\_\_                         { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 51° Time 1:13 } Air { 77°  
                  { 57° Time 1:28 }         { 77°

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction Calm Force 0

Baromet. 30.02 Amt. of Clouds 6 State of Sea 3

Weather B

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide Ebb

General Locality San Pablo

Position { Pt. Pine N80E P. 14 mi  
                  { Pt. Pine S85E 7 mi

Chart used: No. 255533 Ed'n.

Drift: Direction 221° Distance 1.0

Depth of Haul Bottom

Apparatus and Rig used 5' Trawl in 3 ft. net  
with mud

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks: The net or inner line of  
mud was dropped out in transit  
from San Pablo water to rail

Deck Officer Mr. H. H. H. Recorder \_\_\_\_\_

## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0  
~~100~~  
 200  
 300  
 400  
 500  
 600  
 700  
 800  
 900  
 1000  
 1100  
 1200  
 1300  
 1400  
 1500  
 1600  
 1700  
 1800  
 1900  
 2000  
 2100  
 2200  
 2300  
 2400  
 2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000  
 4100  
 4200  
 4300  
 4400  
 4500  
 4600  
 4700  
 4800  
 4900

1 11 00 1 29 35  
 1 13 00 1 28 05

Also 05716

Bridge } No. 5220 Date, Feb. 28, 1912  
 Hydrog. }  
 Sdg. Mch. *Hand* Reel Shot } 15 lbs.  
 Lead }  
 Turns ----- Cor'n ----- Depth 9 fms.  
 Sdg. Cup ----- Amt. Bot'm Sample -----  
 Character of Bottom *ST*  
 Thermom. { Make ----- Cor'n { Instr. -----  
 { No. ----- { Stem. -----  
 Bottom Reading ----- Cor'd Temp. -----  
 Temp. Surf. { 51° Time 1:28 p } Air { 77°  
 { Time ----- {  
 Density: Surf. ----- fms. -----  
 Wind: Direction *Calm* Force 0  
 Baromet. 30.02 Amt. of Clouds 6 State of Sea S  
 Weather *bcy*  
 Direction and Force of Current { Surface -----  
 { Bottom -----  
 Tide *Ebb*  
 General Locality *San Pedro Bay*  
 Position *1st. Base TIDE - 13.00 N*  
*18.10 - 1st. Base - 13.00*  
 Chart used: No. *CS 5333* Ed'n -----  
 Drift: Direction ----- Distance -----  
 Depth of Haul -----  
 Apparatus and Rig used -----

Time towing ----- h. ----- m.  
 Remarks: *Anchor, buoy, etc. etc.*  
*at end of a string. Some time*  
*was lost in getting the anchor*  
*and the buoy. The anchor was*  
*lost in the water and the*  
*buoy was found in the water.*

Deck Officer

*Mr. Burt*

Recorder

*Frank*



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dec 21

Dredge } No. 5717 Date, Feb 28, 1912  
Hydrog. }  
Sdg. Mch. Hand Reel Shot Lead 14 lbs.  
Turns Cor'n Depth 7 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom S

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 51 Time 7:25 Air { 68  
Time

Density: Surf. fms.

Wind: Direction Variable Force 0-1

Baromet. 30.00 Amt. of Clouds 6 State of Sea C

Weather B

Direction and Force of Current { Surface  
Bottom

Tide Ebb

General Locality San Pedro Channel

Position { Lat 12° 15' N Long 117° 15' W  
{ 12° 14' N 117° 14' W

Chart used: No. 05533 Ed'n.

Drift: Direction 2240 Distance 1.0

Depth of Haul Bottom

Apparatus and Rig used 5' Tanner beam trawl  
No dredging.

Time towing 1 h. 15 m.

Remarks:

Deck Officer M. Kelly Recorder G. H. Smith  
11-1023

## SOUNDING WIRE.

M. Down. | Up. | M.

FMS.

## DREDGING CABLE.

P M. Down. | Up. | P M.

0  
30 400  
35 200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900

✓ 12 5 30 2 9 15  
✓ 08 20  
✓ 17 00 2 21 30

11-1021

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 5718 Date, Feb 22, 1912

Hydrog. }  
Sdg. Mch. Hand Reel Shot/Lead 14 lbs.

Turns Cor'n Depth 7 1/2 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom M

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 51 Time 3:20 P } Air { 50 Time

Density: Surf. fms.

Wind: Direction Variable Force 0-1

Baromet. 29.99 Amt. of Clouds 6 State of Sea 8

Weather fog

Direction and Force of Current { Surface Bottom

Tide Ebb

General Locality San Francisco Bay

Position { Oranby Pt. Light - Chimney Pt. Light N 10 E

Chart used: No. CS 5532 Ed'n

Drift: Direction 1240 Distance 0.9

Depth of Haul Bottom

Apparatus and Rig used 5' Trawl & 2 1/2' net

Time towing - h. 22 m.

Remarks:

Deck Officer W. B. Recorder. J. H. 11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
--- M. Down.	Up.	--- M.		(P) M. Down.	Up.	(P) M.
			0	31/9 55	0 4	44
			100	2 3/4 45	3 45	45
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 15022 Date, Feb 28, 1912  
Hydrog. }

Sdg. Mch. Reel Shot Lead 14 lbs.

Turns Cor'n Depth 9 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 57° Time 3:45 } Air { 58°  
Time

Density: Surf. fms.

Wind: Direction Force 2

Baromet. 30.08 Amt. of Clouds State of Sea S

Weather

Direction and Force of Current { Surface  
Bottom

Tide Ebb

General Locality

Position { Southampton Shoal N 8 E - Blue  
Pt 538 W - Channel Pt N 57 W

Chart used: No. 025532 Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer

Recorder



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
--- M. DOWN.	UP.	--- M.		--- M. DOWN.	UP.	--- M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

$2^3$ 

Sdg. Meh. *Neocalanus irroratus*

Turns ..... Cor'n ..... Depth  $6\frac{1}{4}$ 

Sdg. Cup	Amt. Bot'm Sample
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

Character of Bottom -----

Thermom. { Make  
No. \_\_\_\_\_ } Cor'n { Instr.  
Stem. \_\_\_\_\_ }

*Bottom Reading* \_\_\_\_\_ *Cor'd Temp.* \_\_\_\_\_

Temp. Surf. {  $5^{\circ}10$  Time 10:47 } Air {  $5^{\circ}10$  }

Density: Surf. fms,

Wind: Direction *North* Force *1 - 2*

Baromet.	29.86	Amt. of Clouds	10	State of Sea	1
----------	-------	----------------	----	--------------	---

Weather 93.

Direction and Force of Current.  $\left\{ \begin{array}{l} \text{Surface} \\ \text{Bottom} \end{array} \right.$

Title \_\_\_\_\_

General Locality

Position

Chart used : No. Ed'n

*Drift: Direction* *Distance*

Depth of Haul 200 fms.

Apparatus and Rig used 5" Tannin, 1000 ml

2 years ago, I was very young.

Monday, 1st May

Time towing  $h$ ,  $m$ ,

Remarks: 10-16-78 10:00 AM

Deck Officer *W. Starnes* Recorder *W. Starnes*

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
A. M. Down.	Up.	A. M.		A. M. Down.	Up.	A. M.
			0	10 45 50	11 07 40	
			100	10 45 00	11 06 10	
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

~~Hydrog.~~ No. 5555 Date, 1912

Sdg. Mch. Reel Shot Lead 14 lbs.

Turns Cor'n Depth 6 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 51 Time 11:05 } Air { 53 ~ Time

Density: Surf. fms.

Wind: Direction South Force 1 ~

Baromet. 29.55 Amt. of Clouds 10 State of Sea 5

Weather Bz

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer Recorder A. E. H. 11-1023

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

M. Down.

Up.

M.

M. Down.

Up.

M.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

21

Dredge } No. 576 Date, July 1, 1912  
Hydrog. }  
Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot/Lead 1-1 lbs.  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 14 3/4 fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
                  { No. \_\_\_\_\_                         { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 52 Time \_\_\_\_\_ } Air { \_\_\_\_\_ }  
                  { 52 Time \_\_\_\_\_ }                         { \_\_\_\_\_ }

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction S.W. Force 2

Baromet. 29.89 Amt. of Clouds 10 State of Sea S

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position \_\_\_\_\_

Chart used: No. \_\_\_\_\_ Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul Bottom

Apparatus and Rig used S Tanner  
2 m. g. net  
light: 1 mud bag.  
V Time towing h. 11 m.

Remarks: \_\_\_\_\_

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0	1	13	1	30	00
400	1	16	30	1	27 30
200					
300					
400					
500					
600					
700					
800					
900					
1000					
1100					
1200					
1300					
1400					
1500					
1600					
1700					
1800					
1900					
2000					
2100					
2200					
2300					
2400					
2500					
2600					
2700					
2800					
2900					
3000					
3100					
3200					
3300					
3400					
3500					
3600					
3700					
3800					
3900					
4000					
4100					
4200					
4300					
4400					
4500					
4600					
4700					
4800					
4900					

*dredge*  
Hydrog. } No. *1* Date, *March 1*, 19*12*

Sdg. Mch. *Hand* Reel Shot } *1* lbs.  
Lead }

Turns Cor'n Depth *11* fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom *gray sand*

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { *52* Time *1.00 P.* Air { *54*  
Time

Density: Surf. fms.

Wind: Direction *S. W.* Force *2*

Baromet. *30.1* Amt. of Clouds *10* State of Sea *5*

Weather *bc*

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer *W. J. ...* Recorder *J. B. ...*



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. *10* Date, *July 1*, 19*07*  
Hydrog. }

Sdg. Mch. *114* Reel *14* lbs.

Turns Cor'n Depth 8 1/2 fms

Sdg. Cup	Amt. Bot'm Sample
.....	.....

Character of Bottom *fine sand*

Thermom. { Make  
No. } Cor'n { Instr.  
Stem

Bottom Reading. Cor'd Temp.

Temp. Surf. {  $\begin{array}{l} 52 \\ 52 \end{array}$  Time  $\begin{array}{l} 1:22 P. \\ 2:23 P. \end{array}$  } Air {  $\begin{array}{l} 51 \\ 53 \end{array}$  }

Density: Surf. fms.

Wind: Direction S. W. Force 2

Baromet.	29.9	Amt. of Clouds	1	State of Sea	1
----------	------	----------------	---	--------------	---

Weather

Direction and Force of Current.  $\left\{ \begin{array}{l} \text{Surface} \\ \text{Bottom} \end{array} \right.$

General Locality -----

Position .....

Chart used: No. \_\_\_\_\_ Ed'n \_\_\_\_\_

Drift: Direction	Distance
------------------	----------

Depth of Haul Bottom

Apparatus and Rig used *Q. Agassiz* 1 Dec 1892

2. *Alnus* *incana* *Mill.*

1. The first part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation

Time towing \_\_\_\_\_ h. 28 m.

Remarks:

Deck Officer *Thos. J. Davis*, Recorder, *John C. ...*

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. DOWN.	Up.	M.		M. DOWN.	Up.	M.
			0	1		
			100	1	5	30
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

*Drosophila* } No. 27 Date, July 21, 1917  
*Hydrogaster* }

Sdg. Mch.	Reel	Shot Lead	lbs.
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31
32	32	32	32
33	33	33	33
34	34	34	34
35	35	35	35
36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
65	65	65	65
66	66	66	66
67	67	67	67
68	68	68	68
69	69	69	69
70	70	70	70
71	71	71	71
72	72	72	72
73	73	73	73
74	74	74	74
75	75	75	75
76	76	76	76
77	77	77	77
78	78	78	78
79	79	79	79
80	80	80	80
81	81	81	81
82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

Turns ..... Cor'n... Depth 8 fms.

Sdg. Cup	Amt. Bot'm Sample
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Character of Bottom *11/10/11 2011*

Thermom. { Make ----- Cor'n { Instr. -----  
              { No. -----               { Stem. -----

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 52 Time 2:23 P. } Air { 53 }

Density: Surf. fms. \_\_\_\_\_

Wind: Direction S. W. Force 2

Baromet. 29.88 Amt. of Clouds 10 State of Sea S

Weather: Partly cloudy, 60-70°

Direction and Force of Current.	Surface	.....
	Bottom	.....

Tide...

General Locality \_\_\_\_\_

*Position* # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Chart used: No. Ed'n

*Drift: Direction*  *Distance*

Depth of Haul .....

#### Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer / Recorder /

## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

Dredge } No. 71 Date, July 1, 1911

Sdg. Mch. Reel Shot/Lead 1 lbs.

Turns Cor'n Depth 5 1/4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom fine sand

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { Time 3:12 } Air { 83 } Density: Surf. fms.

Wind: Direction S.W. Force 2

Baromet. 29.98 Amt. of Clouds 10 State of Sea S.

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used

Handwritten notes describing the apparatus and rig used.

Time towing h. 2 m.

Remarks: X Tow 17 minutes

Deck Officer Recorder

## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0	2	44	30	3	14	20
100	2	46	30			
200	3	04	15	3	12	15
300						
400						
500						
600						
700						
800						
900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						
2500						
2600						
2700						
2800						
2900						
3000						
3100						
3200						
3300						
3400						
3500						
3600						
3700						
3800						
3900						
4000						
4100						
4200						
4300						
4400						
4500						
4600						
4700						
4800						
4900						

Dredge } No. 5126 Date, March 1, 19  
Hydrog. }  
Sdg. Mch. Lucas Reel 14 Shot  
Lead 14 lbs.

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 434 fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_

Character of Bottom Becky sand

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
No. \_\_\_\_\_ Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { Time 3:12 P } Air { 50 }  
Time \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction S.W. Force 2

Baromet. 29.90 Amt. of Clouds 9 State of Sea S

Weather B-c.

Direction and Force of Current { Surface \_\_\_\_\_  
Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position \_\_\_\_\_

Chart used: No. \_\_\_\_\_ Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks:

Deck Officer J. J. L. Recorder J. J. L.



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 5723 Date, May 1, 1912  
 Hydrog. }  
 Sdg. Mch. Hand lead Reel Shot Lead 11 lbs.  
 Turns Cor'n Depth 9 1/2 fms.  
 Sdg. Cup Amt. Bot'm Sample  
 Character of Bottom M.S.

Thermom. { Make Cor'n { Instr.  
 { No. { Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { Time 10:12 AM Air {

Density: Surf. fms.

Wind: Direction S E Force 5

Baromet. 29.90 Amt. of Clouds 9 State of Sea

Weather bc

Direction and Force of Current { Surface  
 { Bottom

Tide Flood

General Locality San Francisco Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Botm.

Apparatus and Rig used 1' Tanner Trawl

Ref. c.

Time towing - h. 2 m.

Remarks: When hauling in and out  
 out 10:15:30, wire broke and  
 in San Francisco. Found it at  
 in wire out from San Francisco  
 and. Found it broken and replaced  
 wire in house.

Deck Officer Mr. C. W. Recorder

## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0	10	00	05	10	29	10
35 400	10	12	00	10	15	00
200						
300						
400						
500						
600						
700						
800						
900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						
2500						
2600						
2700						
2800						
2900						
3000						
3100						
3200						
3300						
3400						
3500						
3600						
3700						
3800						
3900						
4000						
4100						
4200						
4300						
4400						
4500						
4600						
4700						
4800						
4900						

Bridge } No. 5027 Date, June 6, 1912  
Hydrog. }  
Sdg. Mch. Hand Reel Shot/Lead 14 lbs.  
Turns Cor'n Depth 11 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 50° Time 10:20 am } Air { 20°  
Time

Density: Surf. fms.

Wind: Direction SE Force 5

Baromet. 29.54 Amt. of Clouds 0 State of Sea C

Weather bc

Direction and Force of Current { Surface  
Bottom

Tide

General Locality San Francisco Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer W. C. Cline Recorder J. H. H. H.

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
--- M. Down.	Up.	--- M.		--- M. Down.	Up.	--- M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge No. 574 Date, Mar 6, 1912

Sdg. Mch. Hand line Reel Shot/Lead lbs.

Turns Cor'n Depth 27 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 52° Time 1:25 P. } Air { 52° 50° Time 1:35 P. }

Density: Surf. fms.

Wind: Direction S. S. E. Force 2-4

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality San Tomas Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used. 9' Agassiz, 3 glass floats, 2 wing weights, 1 tail weight, 1 trisler

Time towing h. m.

Remarks: The haul was made in the morning and the trisler was used to catch the fish.

Deck Officer Mr. C. H. Long Recorder

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0	1	21	00
			100			35
			200			40
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Trawl or } No. \_\_\_\_\_ Date, \_\_\_\_\_, 19\_\_  
Hydrog. }

Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot }  
Lead } lbs.

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 8' 2" fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_

Character of Bottom \_\_\_\_\_

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
No. \_\_\_\_\_ Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 55.0° Time 1.39 P { Air { 55.3°  
Time \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction S.W. E. Force 3

Baromet. \_\_\_\_\_ Amt. of Clouds 0 State of Sea 0

Weather Bkg

Direction and Force of Current { Surface \_\_\_\_\_  
Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position \_\_\_\_\_

Chart used: No. \_\_\_\_\_ Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks: \_\_\_\_\_

Deck Officer T. J. 102 Recorder 102



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1800			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. *1* Date, *July 1*, 19*00*

Sdg. Mch. *Lucas* Reel *Lucas* Shot & Lead *15* lbs.

Turns *100* Cor'n *1* Depth *7 1/2* fms.

Sdg. Cup *Lucas* Amt. Bot'm Sample *100*

Character of Bottom *fine sand*

Thermom. { Make *Lucas* Cor'n { Instr. *Lucas*  
No. *1* Stem. *Lucas*

Bottom Reading *100* Cor'd Temp. *53.5*

Temp. Surf. { *50.0* Time *1:00* } Air { *53.5*  
*50.0* Time *2:05* } *52*

Density: Surf. *1.025* fms. *100*

Wind: Direction *SE* Force *3*

Baromet. *30.0* Amt. of Clouds *0* State of Sea *1*

Weather *bcz*

Direction and Force of Current { Surface *SE*  
Bottom *SE*

Tide *low*

General Locality *off Cape Cod*

Position *41° 45' N, 70° 15' W*

Chart used: No. *1144* Ed'n *1*

Drift: Direction *SE* Distance *1.5*

Depth of Haul *bottom*

Apparatus and Rig used *5' Tannock, 1 sinker*

Time towing *1* h. *15* m.

Remarks: *100 fms. haul*

Deck Officer *J. H. ...* Recorder *...*

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0	1 50	30	2 20
			35-100	1 50	50	2 40
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Hydrog. } No. 1 Date, 7, 1912

Sdg. Mch. Reel Shot/Lead 15 lbs.

Turns Cor'n Depth 7 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 50° Time 2:05 Air {

Density: Surf. fms.

Wind: Direction 45 E Force 2

Baromet. 29.95 Amt. of Clouds 10 State of Sea 0

Weather 0

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer Recorder

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 5726 Date, 7/10/02, 1902

Sdg. Mch. Reel Shot/Lead lbs.

Turns Cor'n Depth 6 3/4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 51.0 Time 10.2 } Air { 54.5 Time 11.02 }

Density: Surf. fms.

Wind: Direction Various Force 1

Baromet. 30.20 Amt. of Clouds 8 State of Sea

Weather Bkz

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used 7' Agassiz, 150' ... 2 ... (Wich ...)

Time towing h. 1/2 m.

Remarks:

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0	10 38 20	11 52 10	
			100	10 41 10	10 58 30	
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

~~Tide-gage~~ } No. 2: 22 Date, Dec 1, 1902

Sdg. Mch. Trawl Shot } lbs.  
Lead }

Turns ----- Cor'n ----- Depth 6 3/4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make  
No.

Cor'n { Instr.  
Stem.

Bottom Reading

Cor'd Temp.

Temp. Surf. { 52° Time 11.02 } Air { 54.5°  
Time ----- }

Density: Surf. ----- fms.

Wind: Direction S Force 1

Baromet. 30.20 Amt. of Clouds 7 State of Sea S

Weather bcy

Direction and Force of Current { Surface  
Bottom

Tide

General Locality

Position

Chart used: No. ----- Ed'n -----

Drift: Direction ----- Distance -----

Depth of Haul -----

Apparatus and Rig used -----

Time towing h. m.

Remarks:

Deck Officer

Recorder



## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

					0				
					100				
					200				
					300				
					400				
					500				
					600				
					700				
					800				
					900				
					1000				
					1100				
					1200				
					1300				
					1400				
					1500				
					1600				
					1700				
					1800				
					1900				
					2000				
					2100				
					2200				
					2300				
					2400				
					2500				
					2600				
					2700				
					2800				
					2900				
					3000				
					3100				
					3200				
					3300				
					3400				
					3500				
					3600				
					3700				
					3800				
					3900				
					4000				
					4100				
					4200				
					4300				
					4400				
					4500				
					4600				
					4700				
					4800				
					4900				

Dredge } No. 5727, Date, June 1, 1902

Sdg. Mch.	Reel	Shot	Lead	lbs.
-----------	------	------	------	------

Turns ----- Cor'n ----- Depth 5 3/4 fms.

<i>Sdg. Cup</i>	<i>Amt. Bot'm Sample</i>
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

### Character of Bottom

<i>Thermom.</i>	{	<i>Make</i> -----	<i>Cor'n</i>	{	<i>Instr.</i>
	}	<i>No.</i> .....		}	<i>Stem.</i>

Bottom Reading Cor'd Temp.

Temp. Surf. { 52° Time 14:22 } Air { 59°  
Time

Density: Surf. fms.

Wind: Direction *100-200* Force *2-3*

Baromet.	30.14	Amt. of Clouds	8	State of Sea	S
----------	-------	----------------	---	--------------	---

Weather ..... 64

Direction and Force of Current. { Surface  
Bottom

Tide . . .

*General Locality*

### Position

Chart used: No.

*Drift: Direction*

Depth of Haul ..... 10 fms.

### Apparatus and Rig used

Time towing \_\_\_\_\_ h. / \_\_\_\_\_ m.

Remarks: The animal is nearly 1/2  
 but not fully grown.  
 Not seen, as yet.

Deck Officer

Deck Officer *Mr. A. H. H.* Recorder

## SOUNDING WIRE.

M. Down. <sup>1</sup> Up. .... M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0  
~~35-100~~12 40 35 1 31 20  
12 43 20 12 58 20

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

Hydrog. No. 521 Date, June 8, 1917

Sdg. Mch. Handson Reel Shot Lead 14 lbs.

Turns Cor'n Depth 5 1/4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 15.2 Time 1:00 & { Air { 62.0 Time

Density: Surf. fms.

Wind: Direction North Force 2

Baromet. 30.1 Amt. of Clouds 5 State of Sea C

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality San Francisco Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer H. A. Recorder

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 5722 Date, Jan 8, 1912

Sdg. Mch. (Horn) Reel Shot/Lead 14 lbs.

Turns Cor'n Depth fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { Time 1:21 } Air { 62 Time

Density: Surf. fms.

Wind: Direction North Force 2

Baromet. 30.12 Amt. of Clouds 5 State of Sea

Weather haze.

Direction and Force of Current { Surface Bottom

Tide

General Locality San Francisco Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used 5 ft. beam trawl  
150-lb. net with 1/2 inch mesh  
2 glass floats

Time towing - h. 35 m.

Remarks: White washing on inside  
from net at bottom of  
net carries away and  
some lost.

Deck Officer Mr. Fleet Recorder A. T. Kell

## SOUNDING WIRE.

M. Down. | Up. | M.

FMS.

## DREDGING CABLE.

(P) M. Down. | Up. | M.

0	/ 4 00	/ 00 00
20 100	/ 21 00	/ 15 00
200		
300		
400		
500		
600		
700		
800		
900		
1000		
1100		
1200		
1300		
1400		
1500		
1600		
1700		
1800		
1900		
2000		
2100		
2200		
2300		
2400		
2500		
2600		
2700		
2800		
2900		
3000		
3100		
3200		
3300		
3400		
3500		
3600		
3700		
3800		
3900		
4000		
4100		
4200		
4300		
4400		
4500		
4600		
4700		
4800		
4900		

~~Hydrog.~~ } No. 557 Date, Dec 8, 1912  
Sdg. Mch. Hand Reel Shot Lead 10 lbs.  
Turns Cor'n Depth 5 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 52° Time 1:57 } Air { 61°  
Time

Density: Surf. fms.

Wind: Direction Variable Force 2

Baromet. 30.12 Amt. of Clouds 7 State of Sea C

Weather haze

Direction and Force of Current { Surface  
Bottom

Tide

General Locality San Francisco Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks

Deck Officer W. L. Recorder (E. J. J.)



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			



## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0	2	37	5	2	27	45
25 400	1	39	25	2	28	25
200						
300						
400						
500						
600						
700						
800						
900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						
2500						
2600						
2700						
2800						
2900						
3000						
3100						
3200						
3300						
3400						
3500						
3600						
3700						
3800						
3900						
4000						
4100						
4200						
4300						
4400						
4500						
4600						
4700						
4800						
4900						

Dredge } No. 725  
 Hydrog. } 15

Date, Feb 28, 1977

Solg. Meh. 17.11.1911

*David*

Shot 12 lbs.

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 45 fms.

*Sdg. Cup*

*Amt. Bot'm*  
*Sample*

### Character of Bottom

Thermom.  $\left\{ \begin{array}{l} \text{Make} \\ \text{No.} \end{array} \right.$

Cor'n { Instr.  
Stem.

### Bottom Reading

Cor'd Temp.

Temp. Surf. { 52° Time 7:55 AM } Air { 65° -  
Time

Density: Surf.

fms.

Wind: Direction

Calm

*Levi's* *Levi's*

Baromet. 30.15

Amt. of  
Clouds

(2)

State of  
Sea

Weather

Lucy

*Direction and Force* { *Surface*  
*of Current.* { *Bottom*

*Tide*

General Locality: San Francisco

### Position

Chart used: No.

*Edith*

*Drift: Direction* 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 *Distance* 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360

Depth of Haul.....

### Apparatus and Rig used . . . .

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks:

Deck Officer Mr. A. L.

## Records

Printed

## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

Dredge } No. 5720 Date, June 8, 1912

Sdg. Mch. Hand Reel Shot Lead 14 lbs.

Turns Cor'n Depth 5 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 62 Time 3:10 } Air { 62 Time

Density: Surf. fms.

Wind: Direction Trade Force 0-1

Baromet. 30.10 Amt. of Clouds 3 State of Sea 8

Weather B. C.

Direction and Force of Current { Surface Bottom

Tide

General Locality San Francisco Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used O. Ring

Time towing 12 m.

Remarks:

Deck Officer T. C. V. Recorder

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0	3	11	57 3 27 00
			100	3	13	50 3 25 45
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

*Tredge* } No. 5564 Date, July 12, 1912  
*Hydrog.* }  
*Sdg. Mch.* Hand Reel Shot 12 lbs.  
Lead }  
Turns Cor'n Depth 514 fms.  
*Sdg. Cup* Amt. Bot'm Sample  
Character of Bottom

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { Time 5:28 } Air {  
Time

Density: Surf. fms.

Wind: Direction Variable Force 0-1

Baromet. 30.08 Amt. of Clouds 3 State of Sea S

Weather Fog

Direction and Force of Current { Surface  
Bottom

Tide

General Locality San Francisco Bay

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer Mr. [Signature] Recorder [Signature]  
11-1023



## SOUNDING WIRE.

M. Down. | Up.    M.

FMS.

## DREDGING CABLE.

M. Down. | Up.    M.

0  
100  
200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900

Dredge } No. 5731 Date, March 11, 1912  
Hydrog. }  
Sdg. Mch. Handline fms. Reel Shot Lead 14 lbs.  
Turns Cor'n Depth 16 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 51 Time 9:58 H } Air { 50°  
51 Time 10:02 A } 50°

Density: Surf. fms.

Wind: Direction E Force 2

Baromet. 30.10 Amt. of Clouds 10 State of Sea C

Weather o/p

Direction and Force of Current { Surface  
Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used 9 Agassiz 1 mud  
bag; 1 sinker 2 wing weights.  
1 Tail weight; 3 glass floats.  
Time towing h. 10 <sup>2</sup>/<sub>3</sub> m.

Remarks:

Deck Officer Mr. Stanley Recorder H. W. Price

Mr. R. A. Ellis

SOUNDING WIRE.					FMS.	DREDGING CABLE.				
M. Down.		Up.		M.		A. M. Down.		Up.	A. M.	
					0	9	47	00	10	05
					60 100	9	51	00	10	01
					200					
					300					
					400					
					500					
					600					
					700					
					800					
					900					
					1000					
					1100					
					1200					
					1300					
					1400					
					1500					
					1600					
					1700					
					1800					
					1900					
					2000					
					2100					
					2200					
					2300					
					2400					
					2500					
					2600					
					2700					
					2800					
					2900					
					3000					
					3100					
					3200					
					3300					
					3400					
					3500					
					3600					
					3700					
					3800					
					3900					
					4000					
					4100					
					4200					
					4300					
					4400					
					4500					
					4600					
					4700					
					4800					
					4900					

Dredge } No. 5035 Date, March 11, 1912  
Hydrog. }

Sdg. Mch. Handline Reel Shot/Lead lbs.

Turns Cor'n Depth 12 3/4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom Hard Sand

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 51 Time 10:05 } Air { 50°

Density: Surf. fms.

Wind: Direction E Force 3

Baromet. 30.10 Amt. of Clouds 10 State of Sea C

Weather o/p

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position

Chart used: No. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer Mr. R. B. R. Recorder H. W. C. R. S.

SOUNDING WIRE.					FMS.	DREDGING CABLE.				
M. Down.		Up.		M.		M. Down.		Up.		M.
					0					
					100					
					200					
					300					
					400					
					500					
					600					
					700					
					800					
					900					
					1000					
					1100					
					1200					
					1300					
					1400					
					1500					
					1600					
					1700					
					1800					
					1900					
					2000					
					2100					
					2200					
					2300					
					2400					
					2500					
					2600					
					2700					
					2800					
					2900					
					3000					
					3100					
					3200					
					3300					
					3400					
					3500					
					3600					
					3700					
					3800					
					3900					
					4000					
					4100					
					4200					
					4300					
					4400					
					4500					
					4600					
					4700					
					4800					
					4900					